

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. - 25. (cancel)

26. (new): A gallium nitride-based compound semiconductor light-emitting device comprising an n-type semiconductor layer of a gallium nitride-based compound semiconductor, a light-emitting layer of a gallium nitride-based compound semiconductor and a p-type semiconductor layer of a gallium nitride-based compound semiconductor formed on a substrate in this order, and having a negative electrode and a positive electrode provided on the n-type semiconductor layer and the p-type semiconductor layer, respectively; wherein the negative electrode comprises a bonding pad layer and a contact metal layer which is in contact with the n-type semiconductor layer, and the contact metal layer is composed of a Cr-Al alloy.

27. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the Cr-Al alloy has a Cr content of 10 to 90 mass%.

28. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 27, wherein the Cr-Al alloy has a Cr content of 20 to 80 mass%.

29. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 28, wherein the Cr-Al alloy has a Cr content of 40 to 60 mass%.

30. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the contact metal layer has a thickness of 1 to 500 nm.

31. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 30, wherein the contact metal layer has a thickness of 10 nm or more.

32. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the bonding pad layer is formed of a metal selected from the group consisting of Au, Al, Ni, and Cu, or an alloy containing the metal.

33. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the bonding pad layer has a thickness of 100 to 1,000 nm.

34. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 33, wherein the bonding pad layer has a thickness of 200 to 500 nm.

35. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein an AuSn alloy layer is provided on the bonding pad layer.

36. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 35, wherein the Au-Sn alloy layer has a thickness of 200 nm or more.

37. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein a lead free solder layer is provided on the bonding pad layer.

38. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 37, wherein the lead free solder layer has a thickness of 200 nm or more.

39. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the light-emitting device has an adhesion layer formed of Ti between the contact metal layer and the bonding pad layer.

40. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 39, wherein the adhesion layer has a thickness of 1 to 100 nm.

41. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 40, wherein the adhesion layer has a thickness of 10 nm or more.

42. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the light-emitting device has a barrier layer between the contact metal layer and the bonding pad layer.

43. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 35, wherein the light-emitting device has a barrier layer between the bonding pad layer and the Au-Sn alloy layer.

44. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 37, wherein the light-emitting device has a barrier layer between the bonding pad layer and the lead free solder layer.

45. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 42, wherein the barrier layer is formed of a metal selected from the group consisting of Ti, Zr, Hf, Ta, W, Re, Os, Ir, Pt, Fe, Co, Ni, Ru, Rh, and Pd, or an alloy containing the metal.

46. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 45, wherein the barrier layer is formed of a metal selected from the group consisting of Ti, Ta, W, and Pt, or an alloy containing the metal.

47. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 42, wherein the barrier layer has a thickness of 10 to 500 nm.

48. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 47, wherein the barrier layer has a thickness of 50 to 300 nm.

49. (new): A gallium nitride-based compound semiconductor light-emitting device according to claim 26, wherein the light-emitting device is of a flip-chip type.

50. (new): A negative electrode for use in a gallium nitride-based compound semiconductor light-emitting device comprising a bonding pad layer and a contact metal layer which is in contact with the n-type semiconductor layer, wherein the contact metal layer is composed of a Cr-Al alloy.

51. (new): A negative electrode for use in a gallium nitride-based compound semiconductor light-emitting device according to claim 50, wherein the light-emitting device is of a flip-chip type.